Amendments to the Specification

Please replace the second full paragraph on page 1 with the following rewritten paragraph:

Commonly employed fabrication techniques for displays and polymer based devices or other semiconductor electronic devices involve several imaging steps. A substrate coated with a resist or other sensitive material is exposed to radiation through a photo-tool mask to effect some change. By nature these fabrication processes involve a large number of separate steps, each step commonly having a finite risk of failure, thus reducing the overall process yield and increasing the cost of fabricating the finished article. A specific example is the fabrication of color filters for flat panel displays. Color filter fabrication can be a very expensive process because of the high cost of materials and low process yield. Traditional photolithographic processing involves applying color resist materials to a substrate using various coating techniques such as spin coating, slit and spin and spin-less coating. The material is then exposed via a photo-tool mask followed by a development process.

Please replace the first full paragraph on page 2 with the following rewritten paragraph:

Direct imaging has the potential for replacing a multiplicity of steps associated with traditional photolithographic processes with a single imaging step. A downside of direct imaging is that the laser beam is required to scan over the entire surface of the substrate. This necessitates very fast imagewise scanning of the substrate in order to preserve the

advantages of direct imaging over flood exposure. Flood exposure through a photo-tool mask is by nature a very fast imaging process because a small substrate may be exposed at once, or a series of quick step repeat exposures may be used for larger substrates. One way to increase the speed of the direct imaging is to expose the substrate simultaneously with a plurality of laser beams. US Patent 6,146,792 to Blanchet-Fincher et al. describes the production of a durable image on a receiver element, such as a color filter. The laser head suggested in the examples consists of thirty-two 830 nm laser diodes, each having approximately 90 mW of single-mode output.

Please replace the first full paragraph on page 2 with the following rewritten paragraph:

Further improvement in imaging speed is often frustrated by the trade-off between imaging resolution and speed. Color element edge definition requirements dictate that a small pixel size be used (i.e. high resolution imaging). However, the smaller the pixel, the longer it takes to scan ~~it~~ over the substrate to effect the imagewise exposure. The availability of imaging heads with progressively more channels does not entirely address this problem since the required number of channels are difficult to provide in an economical and practical imaging system.

Please replace the paragraph spanning pages 6 and 7 with the following rewritten paragraph:

When any particular element, for example element 122, is un-actuated it forms a flat reflective surface and most of the light 124 <u>reflected from the un-actuated element</u>

is blocked by aperture stop 116. When an element is actuated it forms a curved mirror surface that focuses the light reflected from the actuated element through aperture 114. A lens 118 images light valve 100 to form an imaging swath 120 comprising a plurality of individually modulated beams or channels 126 (corresponding to individual elements 101), which are scanned over the area of the substrate form an image. Further details of the operation of the light valve 100 of FIG. 1 are contained in commonly assigned US Patent 6,147,789 to Gelbart. The light valve may be fabricated to operate over a range of wavelengths from ultra violet, through the visible spectrum, and into the infrared spectrum.

Please replace the second full paragraph on page 8 with the following rewritten paragraph:

Several configurations of color-elements are used in color filters for LCD display panels. Stripe configurations, shown in FIG. 2-A, have alternating columns of red, green and blue color elements and are currently the most common color element configuration. Mosaic configurations, shown in FIG. 2-B, have ~~the~~ color elements alternating in both directions and provide improved color mix. ~~A delta configuration~~ Delta configurations (not-shown) ~~has~~ have red, green and blue filter elements in a triangular relationship to each other ~~provides~~ and provide the best color mix. The mosaic and delta configuration color filters are more difficult to fabricate, the mosaic configuration additionally requiring a more complex driving circuit.

Please replace the paragraph spanning pages 8 and 9 with the following rewritten paragraph:

FIG. 2-A shows a portion of a stripe configuration color filter 10. The color filter 10 comprises a plurality of red, green and blue color elements 12, 14 and 16 formed in alternating columns across a substrate 18. Color elements ~~12 — 16~~ 12, 14, 16 are outlined by a black matrix layer 20, which divides the elements and prevents the backlight leaking between elements. The columns are commonly imaged in elongate stripes and then subdivided by the black matrix 20 into individual color-elements ~~12 — 16~~ 12, 14, 16. The TFT transistor on the associated LCD panel (not shown) is also masked by a portion of the black matrix at area 22.

Please replace the first full paragraph on page 9 with the following rewritten paragraph:

FIG. 2-B shows a color filter 24 in the mosaic configuration, the only difference from the stripe configuration filter shown in FIG. 1-A being the layout of the color elements, ~~12 — 16~~ 12, 14, 16, which alternate in color down the columns as well as across the columns.

Please replace the paragraph spanning pages 9 and 10 with the following rewritten paragraph:

In an embodiment of the present invention a color filter is fabricated by the direct imaging of a dye donor element placed in close contact with a receiver substrate. The dye is imagewise transferred to the substrate using a multi-channel light valve imaging

system. The red, green and blue portions of the filter are imaged in separate steps, each time replacing the dye donor element with the next color dye to be transferred. The light valve has a specially configured channel layout in accordance with the pattern being imaged. More specifically, the light valve, shown in FIG. 3-A at 30, has low resolution channels 32 and high resolution channels 33 arranged in groups 34 according to the image pattern to be printed. Low resolution channels 32 correspond to the interior portion (distal to the edges) of the stripe being imaged (in this case the red stripes 36 on substrate 18). High resolution channels 33 correspond to the edges of the stripes 36, ensuring that the stripes 36 have good edge definition. In this embodiment, the spacing between each group 34 further corresponds to a predetermined spacing between adjacent stripes 36, but this is not mandated. Stripes 36 are formed on substrate 18 by scanning the beams produced by the light valve 30 in the main scan direction indicated by arrow 38. After each scan in direction 38, the light valve is displaced in the sub-scan direction 39 to start a new main scan in direction 38 thus eventually imaging the entire substrate. It should be understood that while light valve 30 is shown in FIG. 3-A at the same scale as the imaged pattern, the schematic illustration is only intended to show the correspondence between the light valve ~~areas~~ groups 34 and the pattern being written and not a physical relationship. In practice, as shown in FIG. 1, the light valve may be imaged onto the substrate by a lens 118, which may reformat the size and shape of the imaging swath at the plane of the substrate.

Please replace the paragraph spanning pages 10 and 11 with the following rewritten paragraph:

Similarly, in FIG. 3-B the imaging of the green ~~stripe~~ stripes 40 on substrate 18 is depicted, red stripe 36 having been imaged in a previous step. The imaging start position of light valve 30 has been displaced in direction 39 to align with the intended location of the green stripes 40. The blue stripes are imaged in a third step (not shown).

Please replace the first full paragraph on page 11 with the following rewritten paragraph:

The non-uniform light valve configuration significantly reduces the number of drivers required by ganging together connections to low resolution channels 32, thus enabling ~~the area~~ low resolution channel 32 to be addressed by a single driver via a single connection. Furthermore, for a given number of drivers, the optionally extended spacing between groups 34 in direction 39 allows a much wider swath to be scanned on each successive scan in direction 38. The number of high and low resolution channels that can be fabricated on a light valve is limited only by the substrate size and not by a limit on the number of drivers.